Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
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Frankfort, Kentucky 40601
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Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:030

Permittee Name:	**Huntington Alloys Corporation**
Mailing Address:	**3200 Riverside Drive, Huntington, WV 25705**
Source Name:	**Huntington Alloys Corporation**
Mailing Address:	**29500 Mayo Trail Road** **Burnaugh, KY 41129**
Source Location:	
Permit ID:	**F-07-048**
Agency Interest #:	**329**
Activity ID:	**APE20060001**
Review Type:	**Conditional Major, Operating**
Source ID:	**21-019-00013**
Regional Office:	**Ashland Regional Office** **1550 Wolohan Drive, Suite 1** **Ashland, KY 41102** **(606) 929-5285**
County:	**Boyd**
Application Complete Date:	**July 3, 2006**
Issuance Date:	**July 1, 2008**
Revision Date:	
Expiration Date:	**July1, 2013**

John S. Lyons, Director
Division for Air Quality

Revised 05/07/07

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	Permit type	**Activity#**	**Complete Date**	**Issuance Date**	**Summary of Action**
F-07-048	**Initial**	**APE20060001**	**07/3/06**	**7/1/08**	**Initial Condition Major Permit**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Indirect Heating Unit

EP 15 - Gas Boiler for Pickling

Description: Gas Boiler for Pickling Operation – Cleaver Brooks
Fuel: Natural gas
Construction Date: 1970
Rated Capacity: 20.9 mmBtu/hr
Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 61:015 – *Existing Indirect Heat Exchangers*, applies with respect to particulate emissions and sulfur dioxide emissions to each affected facility with a capacity of 250 million Btu/hr heat input or less and greater than one (1) million Btu/hr, and commenced before April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to 401 KAR 61:015, Section 4(1), emissions of particulate matter from the combustion of natural gas shall not exceed 0.37 lb/mmBtu for the Gas Boiler for Pickling based on a three-hour average.

b) Pursuant to 401 KAR 61:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except for emissions during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

c) Pursuant to 401 KAR 61:015, Section 5(1), emissions of sulfur dioxide from the combustion of natural gas shall not exceed 4.78 lb/mmBtu, for the Gas Boiler for Pickling based on a 24-hour average.

Compliance Demonstration Method:

a) Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs total particulates per million standard cubic feet (mmscf) of natural gas burned and a fuel heat capacity of 1020 mmBtu/mmscf.

b) Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs of sulfur dioxide per mmscf and a fuel heat capacity of 1020 mmBtu/mmscf.

c) Compliance with the opacity limit is demonstrated when burning natural gas.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 401 KAR 61:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the monthly natural gas usage rate (cubic feet) and the monthly hours of operation of the boiler.

5. Specific Recordkeeping Requirements:

a) Record shall be kept in accordance with **4. Specific Monitoring Requirements**.

b) Records shall be maintained of any necessary repairs, maintenance, inspection, calibration and/or replacement of combustion equipment.

c) Records shall be maintained in accordance wit **Section F.2.**

6. Specific Reporting Requirements:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Process Operations

Emission Point	Description	Installation Date	Maximum Capacity (ton nickel alloy processed per hour)
01	**Blending and Ball Milling Powder Metals:** Batch operation consisting of blending and ball milling of powder materials. Equipped with a baghouse for particulate control - control efficiency of 99.9%.	1969	0.71
13	**Billet Heating Furnace:** Continuous operation consisting of natural gas fired furnace heating billets. Fuel: Natural gas Rated Capacity: 38.0 mmBtu/hr Control Equipment: None	1970	17.5
14	**Annealing Furnace:** Continuous operation consisting of metal annealing furnace. Fuel: Natural gas Rated Capacity: 18.0 mmBtu/hr Control Equipment: None	1972	2.65
18	**Induction Melting:** Batch operation consisting of induction melting of the metal. Equipped with a baghouse for particulate control - control efficiency of 99.9%.	1969	6.00
19	**Ingot Pouring:** Batch operation consisting of pouring of melted metal into ingot. No emission control.	1969	6.00
22	**Striker Plate Cut-off, Plasma Torch:** Batch operation consisting of metal cutting using plasma torch. No emission controls.	1973	6.00
23	**Electroslag Remelt Furnace # 3 & #4:** Batch operation consisting of electroslag remelt furnace. Equipped with a baghouse for particulate control - control efficiency of 99.0%	1982	1.00; and 0.63 tons flux/hr
24	**Electroslag Remelt Furnace # 5 & #6:** Batch operation consisting of electroslag remelt furnace. No emission controls.	1985	1.00; and 0.63 tons flux/hr
25	**Electroslag Remelt Furnace # 7 & #8:** Batch operation consisting of electroslag remelt furnace equipped with a baghouse for particulate control with control efficiency of 99.0%	1992	1.00; and 0.63 tons flux/hr
26	**Electroslag Remelt Furnace # 9 & #10:** Batch operation consisting of electroslag remelt furnace equipped with a baghouse for particulate control with control efficiency of 99.0%	1997	1.00; and 0.63 tons flux/hr

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Description	Installation Date	Maximum Capacity (ton nickel alloy processed per hour)
27	**Electroslag Remelt Furnace # 11:** Batch operation consisting of electroslag remelt furnace equipped with a baghouse for particulate control with control efficiency of 99.0%	2006	0.50; and 0.315 tons flux/hr

APPLICABLE REGULATIONS:

401 KAR 59:010, *New Process Operations,* applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or after July 2, 1975.

401 KAR 61:020, *Existing Source Operations*, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulates, commenced on or before July 2, 1975.

401 KAR 63:020, *Potentially hazardous matter or toxic substances,* is applicable to an emissions unit which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality

1. Operating Limitations:

a) The permittee shall operate each baghouse for particulate matter control to EP 01, EP 18, EP 23, EP 25, EP 26, and EP27 at all times that the associated equipment is in operation.

b) Pursuant to 401 KAR 63:020, Section 3, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

c) The permittee shall limit the material processing rate at each emissions point listed above such that the permittee is in compliance with the emission limitations specified at **2.e Emission Limitations**.

Compliance Demonstration Method:

The permittee is deemed to be in compliance with 401 KAR 63:020, Section 3 when the emission control systems operate as specified in Subsection **7, Specific Control Equipment Operating Conditions**. If units are modified, the Division may require modeling of toxic emissions. Also see **2. Emission Limitations, *Compliance Demonstration Method***.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

a) Pursuant to 401 KAR 59:010, Section 3(1)(a), visible emissions from the control device or stack at EP 23, EP 24, EP 25, EP 26, and EP 27 shall not equal or exceed 20% opacity on a 6-minute average basis.

b) Pursuant to 401 KAR 59:010 Section 3(2)(a), emissions of particulate matter (PM/PM_{10}) from the control device or stack at EP 23, EP 24, EP 25, EP 26, and EP 27 shall be limited based on the following:

For process rates greater than or equal to 1,000 lbs/hr but less than 60,000 lbs/hr, the allowable emissions of particulate matter shall not exceed:

$3.59 \times (\text{Tons Processed})^{0.62}$ lbs/hr.

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.34 lbs/hr.

c) Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions from the control device or stack at EP 01, EP 13, EP 14, EP 18, EP 19, and EP 22 shall not equal or exceed 40% opacity on a 6-minute average basis.

d) Pursuant to 401 KAR 61:020, Section 3(2), emissions of particulate matter (PM/PM_{10}) from the control device or stack at EP 01, EP 13, EP 14, EP 18, EP 19, and EP 22 shall be limited based on the following:

For process rates greater than or equal to 1,000 lbs/hr but less than 60,000 lbs/hr, the allowable emissions of particulate matter shall not exceed:

$4.10 \times (\text{Tons Processed})^{0.67}$ lbs/hr.

For processing rates of 1,000 lbs/hr or less, the allowable emission rate is 2.58 lbs/hr.

e) See **Section D.3, Source Emission Limitations** for source-wide hazardous air pollutant (HAP) and particulate matter (PM/PM_{10}) emission limitations.

Compliance Demonstration Method:

a) For compliance with the particulate matter emission limitations, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate per unit shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that calendar month. Particulate matter emissions shall be calculated as follows:

PE = [PW x PEF / OH] x (1 - control efficiency)

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Where, PE = particulate emissions (lbs/hr), PW = process weight in tons during the month, PEF = particulate emission factor in lbs/ton of process weight, based on AP-42, the most recent stack test, material balance, or other factor approved by the Division, and OH = unit operating hours during that month.

Also see **3 Testing Requirements, 4. Specific Monitoring Requirements**, and **5. Specific Record Keeping Requirements**.

b) For compliance with the opacity limits, refer to **4. Specific Monitoring Requirements**.

c) Also see **Section D.3, Source Emission Limitations, *Compliance Demonstration Method***.

3. Testing Requirements:

a) Pursuant to 401 KAR 59:005, Section 2(2), 401 KAR 61:005, Section 2(2), and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 and approved by the Division shall be conducted as required in the paragraph below.

b) Within 180 days of the issuance of this permit, the permittee shall perform stack testing to determine emissions of particulate matter (PM/PM10) from EP 18 (Induction Melting) and the Electroslag Remelt Furnaces (ERF). Upon approval by the Division, ERF furnace testing may be conducted on one representative furnace with the results applied to the other furnaces. Furnace sampling time shall be of sufficient length to include fluxing operations. The permittee shall utilize verified particulate emission factor results when demonstrating compliance in accordance with **2.a and 2.d Emission Limitations, *Compliance Demonstration Method***.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

b) The permittee shall monitor, for each emissions point, the monthly amount of process materials added, the monthly hours of operation and the pollutant emission rates computed in accordance with **2. Emission Limitations, *Compliance Demonstration Method***.

c) Also refer to **7. Specific Control Equipment Operating Conditions**.

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain all stack test results and any Method 9 opacity test results.

b) The permittee shall maintain records in accordance with the requirements of **4. Specific Monitoring Requirements**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c) The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when an emission unit at EP 01, EP 18, EP 23, EP 25, EP 26, and EP27 is in operation but the particulate control device is not.

d) The permittee shall maintain records of preventive maintenance and inspection of the particulate control device at EP 01, EP 18, EP 23, EP 25, EP 26, and EP27 in accordance with **7. Specific Control Equipment Operating Conditions**.

e) Refer to **Section D** for source wide recordkeeping requirements.

f) All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a) The permittee shall report any exceedances or excursions from emission limitations or operating limitations.

b) Refer to **Section F- Monitoring, Recordkeeping, and Reporting Requirements**.

c) Refer to **Section D.3, Source Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

Preventive maintenance and/or inspection shall be performed at least once per month for the particulate control device systems, including associated ductwork, in accordance with the manufacturers' recommendations.

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Pickling Operations

Emission Point	Description	Installation Date	Maximum Capacity (ton metal processed/hr)
07	**Pickling Tank #3:** Batch operation consisting of one 15,000 gallon pickling tank containing H_2SO_4 with a maximum makeup rate of 10,000 gal/hr. Fume exhaust system for fugitive emissions capture; no emission controls.	1969	14.00
08	**Pickling Tank #5:** Batch operation consisting of one 15,000 gallon pickling tank containing HNO_3 and NaCl with a maximum makeup rate of 10,000 gal/hr. Fume exhaust system for fugitive emissions capture; no emission controls.	1969	11.00
09	**Pickling Tank #6:** Batch operation consisting of one 15,000 gallon pickling tank containing H_2SO_4 and NaCl with a maximum makeup rate of 10,000 gal/hr. Fume exhaust system for fugitive emissions capture; no emission controls.	1969	11.00
10	**Pickling Tank #7:** Batch operation consisting of one 15,000 gallon pickling tank containing HCl with a maximum makeup rate of 10,000 gal/hr. Fume exhaust system for fugitive emissions capture; no emission controls.	1969	11.00
11	**Rinse Water Tank #8:** Batch operation consisting of one 15,000 gallon rinse tank. No emission controls.	1970	11.00
12	**Pickling - Deglass Salt:** Batch operation consisting of one 15,000 gallon pickling tank containing Deglass Salt used for pickling and surface cleaning. The tank exhausts fugitively inside the building. Fuel: Natural gas Rated Capacity: 10.5 mmBtu/hr Control Equipment: None	1970	14.00

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations* commenced before July 2, 1975 applies to particulate matter (PM/PM_{10}) emissions and visible emissions.

401 KAR 63:020, *Potentially hazardous matter or toxic substances,* is applicable to an emissions unit which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality

1. Operating Limitations:

a) The permittee shall operate each fume exhaust system for fugitive particulate and acid fume capture at all times that the associated metal pickling equipment is in operation.

b) Pursuant to 401 KAR 63:020, Section 3, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c) The permittee shall limit the processing rate at each emissions point listed above such that the permittee is in compliance with the emission limitations specified at **2.c Emission Limitations**.

Compliance Demonstration Method:
The permittee is deemed to be in compliance with 401 KAR 63:020, Section 3 when the equipment and capture systems operate as described above. If units are modified, the Division may require modeling of toxic emissions. Also see **2. Emission Limitations,** ***Compliance Demonstration Method***.

2. Emission Limitations:

a) Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions from the control device or stack at each emission point specified above shall not equal or exceed 20% opacity on a 6-minute average basis.

b) Pursuant to 401 KAR 61:020, Section 3(2), emissions of particulate matter (PM/PM_{10}) from the control device or stack at emission point specified above shall be limited based on the following:

For process rates greater than or equal to 1,000 lbs/hr but less than 60,000 lbs/hr, the allowable emissions of particulate matter shall not exceed:

$4.10 \times (\text{Tons Processed})^{0.67}$ lbs/hr.

For processing rates of 1,000 lbs/hr or less, the allowable emission rate is 2.58 lbs/hr.

c) Also see **Section D.3, Source Emission Limitations** for source-wide hazardous air pollutant (HAP) and particulate matter (PM/PM_{10}) emission limitations.

Compliance Demonstration Method:

a) For compliance with the particulate matter (as acid fume) emission limitations, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate per unit shall be determined by dividing the pounds of acid added to each emission unit in a calendar month divided by total hours the unit operated that calendar month. Particulate matter emissions (as acid fume) shall be calculated as follows:

PE (emissions in lb/hr) = acid makeup rate (lb/month from pickling tank) x rate x weight percent of acid from MSDS / OH x [1-control efficiency].

Where, PE = particulate (as acid fume) emissions (lbs/hr), rate = 0.05 (maximum 5% liquid to gas rate)**, and OH = unit operating hours during that month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**The permittee may apply a unit specific pollutant emission factor (PEF) in lieu of "rate"; i.e., PEF = pounds of particulate (and acid fume) emitted per ton of metal processed, based on the most recent stack test, EPA methodology (e.g., "National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants — Background Information for Promulgated Standards", EPA-453/R-98-010b), or other factor based on accepted chemical engineering practices and references (e.g., Perry's Chemical Engineers' Handbook), as approved by the Division.

Also see **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

b) For compliance with the opacity limits, refer to **4. Specific Monitoring Requirements**.

c) See **Section D.3, Source Emission Limitations, *Compliance Demonstration Method***.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2), and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 and approved by the Division shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

a) The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

b) The permittee shall monitor the monthly amount of acid added to each pickling tank, the monthly hours of operation and the pollutant emission rates computed in accordance with **2. Emission Limitations, *Compliance Demonstration Method***.

c) Preventive maintenance and/or inspection shall be performed at least once per month for each emission point specified in this section, including associated fume exhaust system and ductwork, in accordance with the manufacturers' recommendations.

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain any required stack test results and Method 9 opacity test results.

b) The permittee shall maintain records in accordance with the requirements of **4. Specific Monitoring Requirements**.

c) The permittee shall keep records of Material Safety Data Sheets for each acid used in the pickling tanks.

d) The permittee shall maintain records of preventive maintenance and inspection of each emission point.

e) Refer to **Section D** for source wide recordkeeping requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a) The permittee shall report any exceedances or excursions from emission limitations or operating limitations.

b) Refer to **Section F- Monitoring, Recordkeeping, and Reporting Requirements**.

c) Refer to **Section D.3, Source Reporting Requirements**.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause, and any corrective actions taken due to abnormal visible emissions.

	Description	Generally Applicable Regulation
1.	Extrusion Press BLH OEM 6,000 Ton pressure 9/11/12/14" Containers, installed 1968.	401 KAR 61:020
2.	Tube Reducer Wean United OEM, 125 VMR Max OD 5.25"/length 40', installed 1974.	401 KAR 61:020
3.	Trepan 4 each Max. Bore 10" x 40", installed 1969.	401 KAR 61:020
4.	Lathe 3 each Max. 14" round x 40", installed 1973.	401 KAR 61:020

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter (PM/PM_{10}) and hazardous air pollutant (HAP) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. **Source Emission Limitations:**
To preclude the applicability of 401 KAR 52:020, *Title V permits*, the total annual source-wide emissions shall not exceed the following limitations on a twelve (12) consecutive month basis:

a. Particulate matter (PM/PM_{10}) emissions: 90 tons per twelve (12) consecutive month basis;
b. Any single hazardous air pollutant (HAP): 9 tons per twelve (12) consecutive month basis; and
c. Combined hazardous air pollutant (HAPs): 22.5 tons per twelve (12) consecutive month basis.

Compliance Demonstration Method:
Calculate and record annual source-wide emissions for each month of the previous 12-month period (i.e.: for the month January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January). The monthly compliance demonstration shall include, at a minimum, the following:

a. The monthly and consecutive 12-month throughput rates, and weight percent of HAP metals contained in the metal alloy produced, for the emission points specified in paragraph (b) below.

b. The monthly and consecutive 12-month PM/PM_{10}, individual HAP, and combined HAP emission rates from the following operations:
(1) EP 01 (Blending & Ball Milling Powder Metals)
(2) EP 13 (Billet Heating Furnace)
(3) EP 14 (Annealing Furnace)
(4) EP 15 (Gas Boiler for Pickling)
(5) EP 18 (Induction Melting)
(6) EP 19 (Ingot Pouring)
(7) EP 22 (Striker Plate Cut-off, Plasma Torch)
(8) EP 07 (Pickling Tank #3)
(9) EP 08 (Pickling Tank #5)

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

(10) EP 09 (Pickling Tank #6)
(11) EP 11 (Pickling Tank #8)
(12) EP 12 (Pickling - Deglass Salt)
(13) EP 10 (Pickling Tank #7)
(14) EP 23 (Electroslag Remelt Furnace #3 and #4)
(15) EP 24 (Electroslag Remelt Furnace #5 and #6)
(16) EP 25 (Electroslag Remelt Furnace #7 and #8)
(17) EP 26 (Electroslag Remelt Furnace #9 and #10)
(18) EP 27 (Electroslag Remelt Furnace # 11)

Emission calculations shall be based on the sum of the monthly emission rates from each emission point during each twelve (12) consecutive month period. The monthly emission rates shall be defined as the sum of the products of the processing rates multiplied by each respective emission factor for each emission point. Emission calculations from each operation shall be based on an emission factor acquired from a recently conducted stack test, AP-42, material balance, including weight percent of HAP metals contained in the metal alloy produced, or other approved factor, as required in **Section B** of the permit.

4. Source Recordkeeping Requirements:

Actual PM/PM_{10}, individual HAP, and combined HAPs emissions from each emission point shall be determined and recorded on a monthly basis in accordance with **Source Emission Limitations 3**, ***Compliance Demonstration Method***. The permittee shall maintain records onsite such that they are readily accessible. These records shall indicate the production rate of each type of product and the permittee shall provide these records to Division personnel upon request.

5. Source Reporting Requirements:

The permittee shall report to the Division the monthly and consecutive 12-month totals of PM/PM_{10}, individual HAP, and combined HAPs emitted from the source on a semi-annual basis in accordance with **Section F.6.**

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place (as defined in this permit), and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
   a. Identification of each term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Ashland Regional Office 1550 Wolohan Drive, Suite 1 Ashland, KY 41102-8940	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.

11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
    a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
        (1) The size and location of both the original and replacement units; and
        (2) Any resulting change in emissions;
    b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
    c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
    d. The replacement unit shall comply with all applicable requirements; and
    e. The source shall notify Regional office of all shutdowns and start-ups.
    f. Within six (6) months after installing the replacement unit, the owner or operator shall:
        (1) Re-install the original unit and remove or dismantle the replacement unit; or
        (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
      (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

   b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

   c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

   a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

   a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:

      (1) An emergency occurred and the permittee can identify the cause of the emergency;
      (2) The permitted facility was at the time being properly operated;
      (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,

SECTION G - GENERAL PROVISIONS (CONTINUED)

(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, MD 20703-1515.

   b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None